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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,675	03/07/2002	Jeremiah E. Halley	38190.234783	3821
826	7590	04/28/2004	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			EDMONDSON, LYNNE RENEE	
			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/092,675	Applicant(s) HALLEY ET AL.	
	Examiner Lynne Edmondson	Art Unit 1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 19-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4/22/02</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

1. Claims 19-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the 3/10/04 response.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 6, 7, 9-12 and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Rhoades et al. (USPN 5248077).

Rhoades teaches a method of constructing a preform comprising the steps of determining the dimensions of the assembly (col 9 lines 10-28), positioning the members and friction welding the members such that material waste and machining time are reduced (col 5 line 61 – col 6 line 11). The friction welding step comprises

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moving the members toward each other and applying pressure to form the joint (col 4 lines 50-65). The moving step comprises moving the members in opposing directions. At least one member oscillates (col 4 line 66 – col 5 line 10 and figure 7). Parts are cleaned prior to welding (col 8 line 64 – col 9 line 4). Although heat treatment is preferably performed after welding it may be performed prior to welding (col 9 lines 28-32 and lines 60-68). If necessary, excess material may be removed by machining (col 9 lines 33-45).

4. Claims 1, 2, 5, 9, 10, 13, 15 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Satzler et al. (USPN 3831459).

Satzler teaches a method of constructing a preform comprising the steps of determining the dimensions of the assembly, positioning three members and friction welding the members such that material waste and machining time are reduced (col 3 line 17 – col 4 line 11). The friction welding step comprises moving the members toward each other and applying pressure to form the joint (col 2 lines 62-65). A relief groove (80) is formed proximate the contact surfaces prior to positioning. If necessary, excess material may be removed by machining (col 5 lines 3-18, lines 43-68 and figure 4).

5. Claims 1, 2, 4, 6, 8-11, 14, 15 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Labombard (USPN 6412175 B2).

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Labombard teaches a method of constructing a preform comprising the steps of determining the dimensions of the assembly (col 2 lines 16-19), positioning three members (col 7 lines 58-61) and friction welding the members such that material waste and machining time are reduced (col 13 lines 34-65). The friction welding step comprises moving the members toward each other and applying pressure to form the joint (col 8 line 61 – col 9 line 9). The moving step comprises moving the members in opposing directions (col 14 lines 50-62). Parts are cleaned prior to welding (col 10 lines 48-52). If necessary, excess material may be removed by machining (col 17 lines 5-25).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Crall (USPN 6478545 B2, friction welding, oscillation, relief groove, third component, machined excess), Suzuki et al. (USPN 5168841, friction welding, cleaning, heat treatment, machined excess), Kiwalle et al. (USPN 3841201, friction welding, machined excess) and Searle (RE 35664, friction welding, oscillation, third component).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (571) 272-1172. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5 p.m.

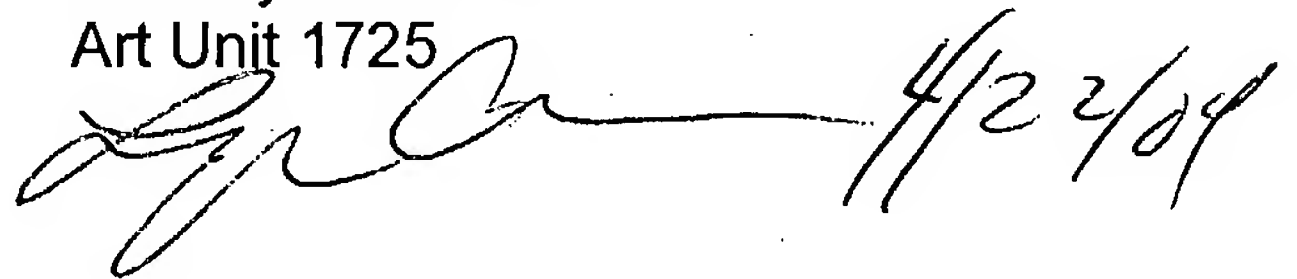
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LRE

Lynne Edmondson
Primary Examiner
Art Unit 1725

A handwritten signature in black ink, appearing to be 'Lynne Edmondson', followed by the date '4/22/04' written in a similar cursive style.